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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,477	10/07/2003	Makoto Shiomi	12480-000019/US	6638
30593 7590 10/16/2007 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			EXAMINER PATEL, NITIN	
			ART UNIT 2629	PAPER NUMBER
			MAIL DATE 10/16/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/679,477		SHIOMI ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Nitin Patel		2629	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-134 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13, 20-25 and 56-134 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/7/2003</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-13, 20-25, 56-134 are rejected under 35 U.S.C. 102(e) as being anticipated by Willis (US 7,145,581).

As per claim 1-13, 20-25 Willis shows a method of driving a display, comprising: storing data corresponding to a drive signal input at a first time; modulating a drive signal input at a second time, subsequent to the first time, based upon the stored data so as to facilitate a tone transition from the first time to the second time; and comparing data corresponding to the drive signal input at the first time and data input at a time previous to the first time, wherein a degree of the modulation is adjustable prior to modulating, with reference to the result of the comparison and wherein when it is determined, on the basis of the drive signal input at the first time and the drive signal input at the second time that the tone transition from the first time to the second time is insufficient, the degree of modulation is reduced and flag information is stored when the determination is made, instructing a process which reduces the degree of the modulation (In col.3 lines 38-67 and col.5 lines 25-60 and in col.7 lines 13-62).

As per claims 56-134, Willis shows a display, comprising: memory means for storing data of a drive signal input at a first time; modulation means for modulating a drive signal input at a second time, subsequent to the first time, based upon the stored data so as to facilitate a tone transition from the first time to the second time; comparison result memory means for storing a result of a comparison of the stored data corresponding to the drive signal input at the first time and data input at a time previous to the first time; and adjusting means for adjusting a degree of the modulating by the modulation means with reference to the result of the comparison stored in the comparison result memory means, drive signal processor for processing a display drive signal, comprising: memory means for storing data of a drive signal input at a first time; modulation means for modulating a drive signal input at a second time, subsequent to the first time, based upon the stored data so as to facilitate a tone transition from the first time to the second time; comparison result memory means for storing a result of a comparison of the stored data corresponding to the drive signal input at the first time and data input at a time previous to the first time; and adjusting means for adjusting a degree of the modulating by the modulation means with reference to the result of the comparison stored in the comparison result memory means, display, comprising: a first storage for storing data corresponding to a drive signal input at a first time; a modulator for modulating a drive signal input at a second time, subsequent to the first time, based upon the stored data so as to facilitate a tone transition from the first time to the second time; a second storage for storing a result of a comparison of the stored data corresponding to the drive signal input at the first time and data input at a time previous

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to the first time; and an adjuster for adjusting a degree of the modulating by the modulator with reference to the result of the comparison stored in the second storage(see column 5-10).


**Conclusion**

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nitin Patel whose telephone number is 571-272-7677. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin H. Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nitin Patel  
Primary Examiner  
Art Unit 2629



NITIN I. PATEL  
PRIMARY EXAMINER